

ABSTRACT

A non-aqueous electrolyte secondary battery containing an alloy particle capable of absorbing and desorbing lithium in the negative electrode has a short cycle life and is insufficient in high-rate discharge characteristics, since the alloy particle is pulverized during charge/discharge cycles. In order to solve this problem, a negative electrode is employed, which comprises an alloy particle containing: at least two selected from the group consisting of metal elements and semimetal elements; oxygen; and nitrogen. It is preferred that the alloy particle have a phase A capable of electrochemically absorbing and desorbing lithium ion and a phase B having lithium ion conductivity or lithium ion permeability and that the phase B contain larger amounts of oxygen and nitrogen than the phase A.